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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,326	09/18/2003	Earl O. Bergersen	BER-P-03-052	6248
29013	7590	02/09/2006	EXAMINER	
PATENTS+TMS, P.C. 2849 W. ARMITAGE AVE. CHICAGO, IL 60647			O CONNOR, CARY E	
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			3732	
DATE MAILED: 02/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,326	Applicant(s) BERGERSEN	
	Examiner Cary E. O'Connor	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-116 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 17, 19-47, 49-72, 74, 75, 77-107 and 109-116 is/are rejected.
- 7) ☒ Claim(s) 15, 18, 48, 73, 76 and 108 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>122903, 71404, 42505</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 69 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 67. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant is advised that should claim 67 be found allowable, claim 69 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as

originally filed, does not provide support for the hinge being sized to contact a molar furthest rearward in a mouth of a user to control eruption of the molar.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 8-11, 14, 17, 19, 21-30, 33, 34, 37-40, 47, 50-55, 78, 79, 81, 83, 84, 87-90, 103-106, 109, 112-115 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (5,876,199). Bergersen '199 shows a dental appliance 210 comprising a generally U-shaped upper base 214, a generally U-shaped lower base 216 having an occlusal surface wherein the occlusal surface contacts the teeth when the base is worn wherein the base has a thickness defined between a first end and a second end wherein the occlusal surface contacts each molar when the base is worn to prevent the molar from achieving a malocclusion position. As to claims 2, 8 and 17, note the hinge 212 connected to the base. The hinge contacts a molar furthest rearward in the mouth. As to claims 4, 24, 25, note that the occlusal surfaces are flat (see Fig. 7). As to claims 9, 27, 28, 51, 83, note the holes 402. As to claims 10, 26, 39, 84, 90, 103-106, 115, note the lingual tabs or ribs 46. As to claims 11, 33, 34, 78, 79, 81, 88, 89, 109, 113, 114, note the socket or slot 16 which is sized to fit at least two teeth. As to claims 19, 29, 52, note that the appliance comprises a labial shield 18 extending from the upper base and contacting the front of the mouth. As to claims 21,

30, 40, the method by which the appliance is designed is not given patentable weight in the apparatus claim because the method does not result in an appliance that is structurally different than the appliance of Bergersen. As to claims 22, 37, 38, the socket is shaped to correspond to the shape of one of the teeth (see Fig. 3). As to claim 47, note that the bases are sized to fit users of various types of dentitions (abstract). As to claims 53-55, 87, 112, note the cavity 60 formed to receive the tongue of a user (column 8, lines 45+).

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (4,139,944). Bergersen '944 shows a dental appliance 20 comprising a generally U-shaped upper base 22, a generally U-shaped lower base 24 having an occlusal surface wherein the occlusal surface contacts the teeth when the base is worn wherein the base has a thickness defined between a first end and a second end wherein the occlusal surface contacts each molar when the base is worn to prevent the molar from achieving a malocclusion position. The appliance is made of a transparent material (column 6, lines 25-27).

Claims 1, 5, 6, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (4,073,061). Bergersen '061 shows a dental appliance 10 comprising a generally U-shaped upper base, a generally U-shaped lower base having an occlusal surface wherein the occlusal surface contacts the teeth when the base is worn wherein the base has a thickness defined between a first end and a second end wherein the occlusal surface contacts each molar when the base is worn to prevent the molar from achieving a malocclusion position. As to claim 5, the lower base is connected to the

upper base by a fastener 35 to prevent movement between the bases. As to claim 6, note the wire 40 embedded in the base.

Claims 40, 43, 44, 47, 52, 78, 79, 81, 86 and 111 are rejected under 35 U.S.C. 102(b) as being anticipated by Hart et al (5,211,559). Hart shows a dental appliance comprising a generally U-shaped upper base 6, a generally U-shaped lower base 8, and a hinge 10, 14 attaching the bases together. The method by which the appliance is designed is not given patentable weight in the apparatus claim because the method does not result in an appliance that is structurally different than the appliance of Hart. As to claims 43, 44, 86 and 111, the bases are formed of a moisture absorbent material (column 3, lines 37-40).

Claim 47 is rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (6,129,084). Bergersen '084 shows a dental appliance comprising a generally U-shaped upper base 10, a generally U-shaped lower base 20, and a hinge 34 attaching the bases together. The bases are sized to fit users of various types dentitions.

Claims 56-62 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (4,898,535). Bergersen '535 shows a dental appliance comprising an upper base, a lower base, and a hinge 44 which, since the bases are molded around the hinges, are inherently inserted into cavities in the bases. The hinge may be made of metal (column 3, lines 30-31). As to claims 58 and 59, the method by which the appliance is designed is not given patentable weight in the apparatus claim because the method does not result in an appliance that is structurally different than the appliance of

Bergersen. As to claim 60 and 61, note the sockets or slots 12, 14 which are sized to fit at least one tooth. As to claim 64, note the labial shield 38.

Claims 65, 67-69, 72, 74, 92-94, 97, 99, 101, 102 are rejected under 35 U.S.C. 102(b) as being anticipated by Kesling (3,724,075). Kesling shows a dental appliance 20 comprising a generally U-shaped base 21 having an occlusal surface wherein the occlusal surface has a rib 35 that rotates teeth (column 4, lines 6-20). As to claims 72 and 92, note the wire (attachment) 40 embedded in the base.

Claims 65-69, 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Bourke (5,536,168). Bourke shows a dental appliance 10 comprising a generally U-shaped base having an occlusal surface wherein the occlusal surface has a projection 18 that exerts a force on teeth. The projections are adjacent an incisor or a molar. The occlusal surfaces are considered to be roughened by virtue of the projections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Watson (5,328,362). Bergersen does not disclose that the base is constructed from two different materials wherein one of the material has a greater rigidity than the other. Watson shows a dental appliance made of two different materials with one material 14 having a greater rigidity than the other material 16, in

order to provide a soft, comfortable appliance that is more rigid and sturdy in the occlusal regions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliance of Bergersen from two different materials wherein one of the material has a greater rigidity than the other as taught by Watson, in order to provide a soft, comfortable appliance that is more rigid and sturdy in the occlusal regions.

Claims 12, 35, 36, 41, 42, 85, 91-97, 99, 101, 102, 110 and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Kesling (3,724,075). Bergersen '199 does not include ribs formed in the bases. Kesling shows a dental appliance having ribs 35 formed in the base to assist in maintaining the proper orientation of the teeth. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen with a rib, in view of Kesling, in order to aid in the proper placement of the appliance in the mouth. The bases of Kesling also include an attachment (hook or clasp) 40 therein. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen with attachments, as taught by Kesling, in order to aid in holding the appliance on the teeth. As to claims 93 and 94, note the socket or slot 16 which is sized to fit at least two teeth, in Bergersen. As to claim 95, note the lingual tabs or ribs 46 of Bergersen.

Claims 16 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Kussick (5,779,470). Bergersen '199 does not include a positioning mark. Kussick shows a dental appliance having a reference mark

to indicate the proper position for the appliance in the mouth (column 5, lines 51-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the appliance of Bergersen with a reference mark, as taught by Kussick, in order to aid in proper placement of the appliance in the mouth.

Claims 20, 77, 80 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Adell (4,983,334). The sockets of Bergersen '199 are not customized to the teeth of the user. Adell shows a dental appliance wherein the sockets are customized to the teeth of the user. It would have been obvious to form the appliance of Bergersen with customized tooth sockets, in view of Adell, in order to more accurately direct the forces to the teeth.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bourke (5,536,168). The appliance of Bergersen '199 does not have a roughened surface. Bourke shows a dental appliance wherein the bases have roughened surface (by virtue of prongs 18) in order to facilitate movement of the teeth. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen with roughened surfaces, as taught by Bourke, to facilitate movement of the teeth.

Claims 45, 46 and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bergersen (4,073,061). The dental appliance of Bergersen '199 does not include a wire imbedded in one of the bases. Bergersen '061 shows a dental appliance having an upper base and a lower base. A wire 40 is embedded in at least one of the bases for engaging and acting of the anterior

teeth. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen with wires embedded therein, as taught by Bergersen '061, in order to direct forces to the anterior teeth when needed.

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (6,129,084) in view of Bergersen (4,898,535). Bergersen '084 does not disclose that the hinge is more rigid than the bases. Bergersen '535 shows a dental appliance comprising an upper base, a lower base, and a hinge which may be made of metal (column 3, lines 30-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the hinge of Bergersen '084 of a metal spring piece, as taught by Bergersen '535, in order to increase the opening force of the appliance.

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (4,898,535) in view of Bergersen (5,876,199). The appliance of Bergersen '535 does not include lingual tabs. Bergersen '199 shows a dental appliance comprising an upper base, a lower base, and a hinge. The appliance includes lingual tabs 46 to keep the mandible moving forward. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the appliance of Bergersen '535 with lingual tabs, as taught by Bergersen '199, in order to keep the mandible moving forward.

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kesling (3,724,075) in view of Bergersen (5,876,199). The appliance of Kesling does not include lingual tabs. Bergersen '199 shows a dental appliance comprising an upper

base, a lower base, and a hinge. The appliance includes lingual tabs 46 to keep the mandible moving forward. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the appliance of Kesling with lingual tabs, as taught by Bergersen '199, in order to keep the mandible moving forward.

Claims 92-95, 98 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bergersen (4,330,272). Bergersen '199 does not include an attachment in a base. The bases of Bergersen '272 include an attachment (tube) 51, 52 therein in order to attach a headgear to the appliance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen with attachments, as taught by Bergersen '272, in order to enable a headgear to be used with the appliance. As to claims 93 and 94, note the socket or slot 16 which is sized to fit at least two teeth, in Bergersen. As to claim 95, note the lingual tabs or ribs 46 of Bergersen.

Allowable Subject Matter

Claims 15, 18, 48, 73, 76 and 108 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Specification

The disclosure is objected to because of the following informalities: Reference numeral 104 refers to a lower shell (page 40, line 18) and an upper incisor (page 40, line 27). Reference numeral 190 refers to spikes (page 38, line 31) and an appliance (page 40, line 33). Reference numeral 329 refers to sockets (page 53, line 31) and a


front section (page 54, line 5). Reference 317 refers to sockets (page 54, line 7) and upper front teeth (page 54, line 7).

Appropriate correction is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cary E. O'Connor
Primary Examiner
Art Unit 3732

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